

Remarks

Claims 1, 3, 4, 7, 13, 15-21, 25-35, 38-40, 45-46 and 51-52 are pending.

Amendment To Correct Typographical Error

Applicants seek to amend Claim 13 to correct a typographical error -- "a radial positioning" should be "radial positioning." The article "a" in this part of Claim 13 is a mistake. See, for example, Claims 39 and 51 reciting a similar limitation in which the article "a" is not used.

Request For Reconsideration

Applicants request that the Examiner reconsider the rejections for the reasons detailed below. Applicants respectfully submit that the Examiner has misinterpreted the term "absolute" as recited in Claims 13, 39 and 51 as well as parts of the Black reference.

Establishing an Absolute Reference for Radial Positioning

In the device of Claim 13, the controller is "configured to ... establish an absolute reference for radial positioning on the untracked non-data side of the disk." In the program storage system of Claim 39, the instructions are executable by the computer to perform the act of "establishing ... an absolute reference for radial positioning on the untracked non-data side of the disk." Similarly, the method of Claim 51 includes "establishing an absolute radial location as a reference for radial positioning on the non-data side of the disk."

The "absolute" limitation recited in Claims 13, 39 and 51 is enabled by U.S. patent Application serial no. 10/347,074, which is incorporated by reference into the present Application at paragraph 0015 of the Specification. Although "absolute" is not specially defined in the '074 Application, its meaning in the context of establishing a reference for radial positioning is clear -- a fixed point or location to which all radial positioning may be referenced.

"The absolute radial location serves as a reference track that all radial positioning can be referenced to." '074 Application, paragraph 0017.

"If a reference pattern is present, radial position driver 202 controls spindle motor 114, sled motor 112, and laser assembly 108 to scan the reference pattern and register the laser beam 124 (i.e., the laser spot from the laser beam 124) to an absolute radial position with respect to the disc 126." '074 Application, paragraph 0028.

"The absolute/reference radial position is a radial location within the reference pattern 300 that can be used as a reference track to which all radial positioning can be referenced." '074 Application, paragraph 0032.

The exemplary embodiments shown in Figs. 4-6 and 9-11 illustrate two such absolute references.

Fig. 4 illustrates laser spot 308 located at the absolute reference while Figs. 5 and 6 illustrate the laser spot 308 located higher and lower, respectively, than the absolute reference position of Fig. 4. '074 Application, paragraphs 0033, 0035, and 0036.

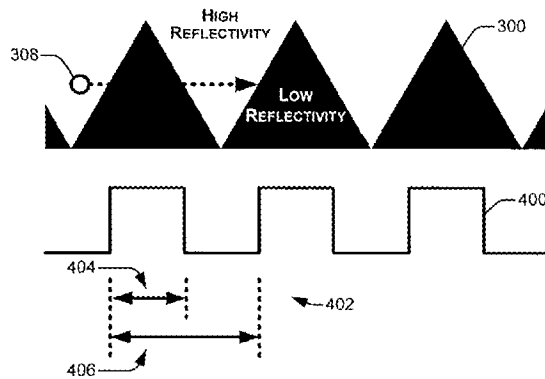


Fig. 4

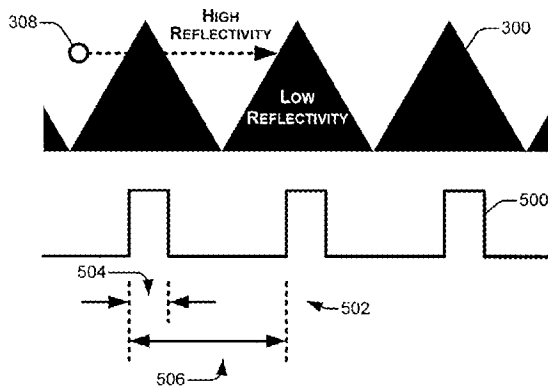


Fig. 5

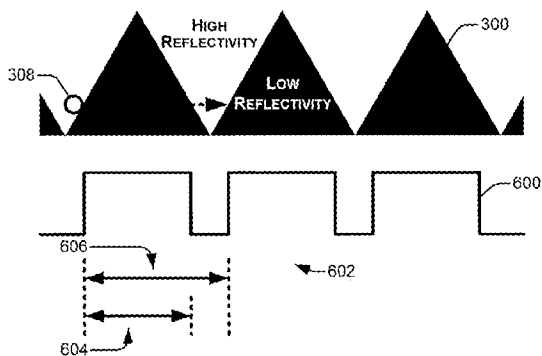


Fig. 6

Similarly, Fig. 9 illustrates laser spot 308 located at the absolute reference while Figs. 10 and 11 illustrate the laser spot 308 located higher and lower, respectively, than the absolute reference position of Fig. 9. '074 Application, paragraphs 0041, 0042, and 0044.

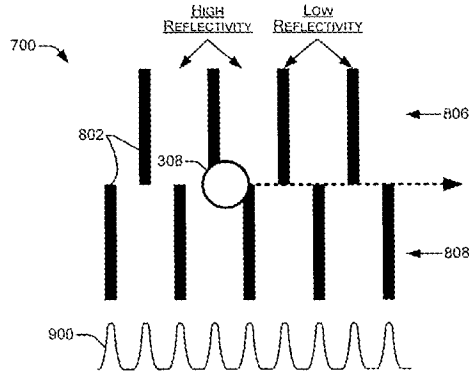


Fig. 9

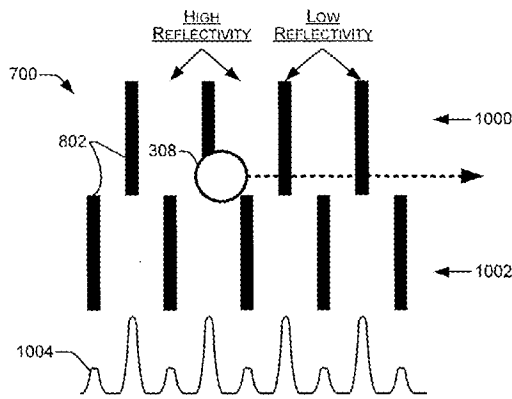


Fig. 10

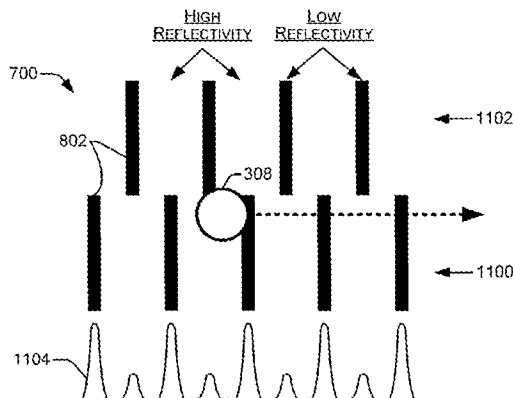


Fig. 11

In Black, signal pulses derived from the "radial boundary transition" on the reference pattern and pulses derived from the "spiral boundary transition" on the reference pattern are used to determine and control the position of the transducer over the disk. See, for example, Black column 2, line 71 through column 3, line 3. In Black, the configuration of the reference pattern allows the transducer to know where it is on the disk -- one side of the star shaped projections on the pattern are radii and other is spiral -- the spoke narrows in the radial direction allowing the transducer to know how far out on the disk radially. The actual position of the transducer can thus be corrected to the desired position (if it is different from the desired position). Nowhere does Black teach establishing a fixed point or position on the disk to which other points or positions are referenced. On the contrary, the reference pattern in Black is used only as a position indicator that indicates the position of the transducer on the disk. This is not the same as establishing an absolute reference for radial positioning on the disk.

Sensing a With a Stationary Detector (Claims 1 and 26)

Claims 1 and 26 were also rejected under Section 103 as being obvious over Honda in view of Black. Claim 1 recites sensing a frequency from the pattern with a stationary detector. Claim 26 recites a means for sensing electromagnetic radiation from a pattern with a stationary sensor.

The Examiner asserts at page 13 of the final Action that the detector of Claim 1 and the sensor of Claim 26 reads on the transducer 50 in Black -- that the light source 40, lens system 43, mirror 46, and front mirror 47 in Black are not needed for Black's detector/sensor. This assertion, of course, is not correct. Black's transducer 50, by definition (like any other "transducer"), converts a signal from one form of energy to another. Transducer 50 by itself cannot detect or sense anything. The plain fact is that Black's detector/sensor is not stationary -- transducer assembly 12 carrying front mirror 47 moves radially along the disk during sensing operations. Black column 5, lines 5-10.

All pending claims distinguish over the art of record. The case is in condition for allowance.

The foregoing is believed to be a complete response to the pending Action.

Respectfully submitted,

/Steven R. Ormiston/

Steven R. Ormiston
Attorney for Applicant
Registration No. 35,974
208.433.1991 x204